

In vitro evaluation of antiplasmodial activity of plant samples used in traditional medicine in Benin

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In order to find local alternatives to expensive available antimalarial drugs and solutions to the emergence of drug resistance of *P. falciparum* strains, we undertook the exploration of plants used against malaria in the traditional pharmacopoeia from Benin. We studied samples of 11 plants from the Beninese flora, to evaluate their antiplasmodial activity and their cytotoxicity. Lipophilic extracts of two of the studied plants: *Acanthospermum hispidum* and *Carpolobia lutea* showed a very interesting *in vitro* antiplasmodial activity against the chloroquine *W*₂ resistant strain with IC₅₀ of 6.6 µg/ml and 5.7 µg/ml respectively; being less active on the 3D7 sensitive strain (IC₅₀: 12.6 µg/ml and 11.91 µg/ml respectively). Two extracts from other plants showed cytotoxic activity. The methanolic extract of *Anchomanes difformis* showed toxicity against *Wi*₃₈ (human embryonic fibroblast; IC₅₀: 12.01 µg/ml) and a lipophilic extract of *Vernonia amygdalina* against J774 (murine macrophages; IC₅₀: 6.48 µg/ml).

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